MULTIPLE IMAGES

The negative-positive process known as photography provides an image in reverse tonal scale and lateral position on a transparent substance called "film" (first paper; later glass and cellulose). When this image is transferred to another support (usually paper), it returns to normal tonal relationship and position. The process was announced in England by William Henry Fox Talbot at the same time as the daguerreotype; called by Fox Talbot the CALOTYPE, later changed to TALBOTYPE.

The collodion process, developed in 1851 in England by Frederick Scott Archer, made possible a more finely detailed grainless negative on glass.

Collodion, discovered in 1847 as a means of protecting wounds, is a mixture of guncotton in alcohol and ether; flowed on to a surface it dries to form a tough, skin-like film . Scott Archer used collodion to attach the silver salts to various substances. Because the plate had to be kept continually moist from preparation through development, the process came to be called "wet plate". Three times, in three guises, the collodion process threatened and finally triumphed over photography.

2. AMBROTYPES ("glass positives")
F. Scott Archer invented his collodion process for making negatives but he described the application of the technique for making positives. A wet-plate negative could be viewed as positive simply by placing it against a piece of dark material or by painting the back black. Like the daguerreotype, such images were unique; the very plate exposed in the camera was itself the final product.

Scott Archer's invention, which he had published without restrictions of any kind, was patented by James Ambrose Cutting of Boston in 1854. Marcus A. Root, a Philadelphia writing master turned daguerreotypist, named the pictures AMBROTYPES. Like the daguerreotypes which they imitated, they were commonly enclosed in leather or composition cases.

3. TINTYPE
A modification of the Scott Archer collodion process; the support for the light-sensitive collodion emulsion being, instead of glass (for ambrotypes), thin metal plates japanned black or chocolate brown. The inventor, Hamilton L. Smith, assigned his 1856 patent to Peter Neff and Peter Neff Jr. The manufacture of plates was begun in 1856 by the Neffs, who named the process MELAINOTYPE, and by Victor M. Griswold, who chose the name FERROTYPE . The more popular word TINTYPE was introduced later.

Because the surfaces of tintypes were not fragile, they could be sent through the mail, carried in the pocket, and mounted in albums. They were processed while the customer waited. They were cheap, not only because the materials